

A NEW SPECIES OF STOMATOPOD, *EURYSQUILLA*
PUMAE (CRUSTACEA: STOMATOPODA: EURYSQUILLIDAE),
FROM THE GULF OF CALIFORNIA, MEXICO

Michel E. Hendrickx and José Salgado-Barragán

Abstract.—A new species of the stomatopod genus *Eurysquilla* Manning, *E. pumae*, is described from the Gulf of California, Mexico.

Two species of the genus *Eurysquilla* Manning, *E. veleronis* (Schmitt) and *E. solari* Manning, are known from the Eastern Pacific. Up to now, only the former has been collected along the coast of Mexico, where it is commonly found on sandy substrates between 29 and 118 m (Hendrickx and Salgado-Barragán 1987).

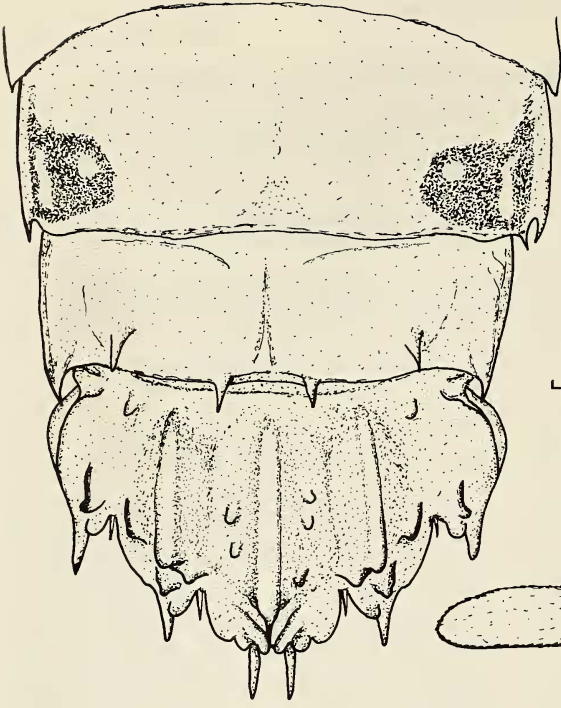
During sampling activities of the B/O *El Puma* in the Gulf of California, Mexico (CORTES Project), in Mar 1985, a male specimen of *Eurysquilla* sp. was collected by trawl. The specimen, which appears to be distinct from *E. veleronis*, was latter compared with type material of *E. solari* at the USNM and identified as an undescribed species.

Eurysquilla pumae, new species

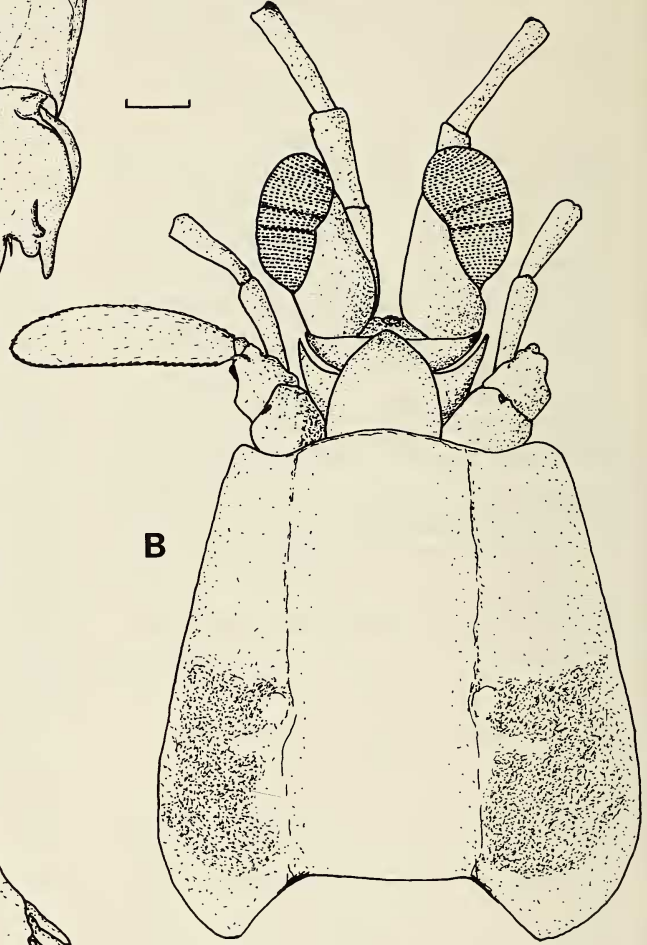
Fig. 1

Diagnosis.—Cornea subglobular, not bilobed, set obliquely on eyestalk; eyestalk almost cylindrical, little inflated near external base. Ocular scales broad, slightly sloping backward (rising forward), with rounded anterolateral corners. Antennal processes acute, directed forward, tip reaching anterior margin of ocular scales. Rostrum triangular, without terminal spine, longer than wide. Raptorial claw with 7 teeth on dactylus. Five epipodites. Sixth and seventh thoracic segments with posterolateral angle slightly produced backward, rounded; 8th thoracic segment laterally rounded. Posterolateral angles of abdominal somites 1, 2, and 3 rounded; 4th with acute angle but

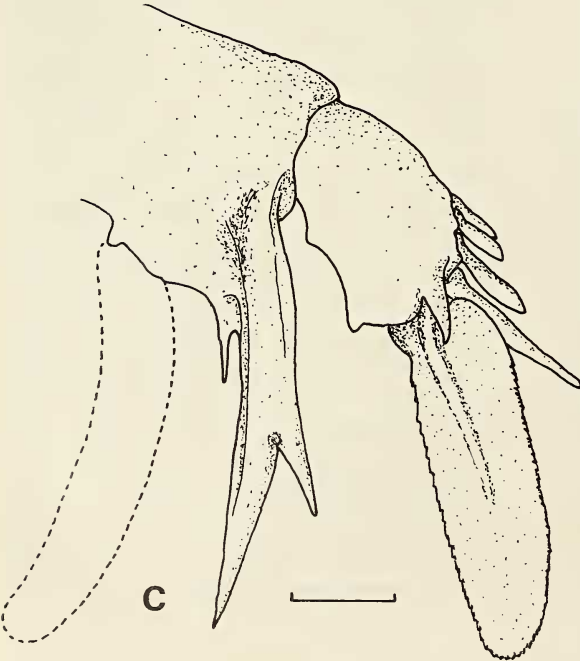
no spine. Posterior spine present on marginal carina of 5th segment (smaller submarginal spine also present on right side), and on marginal, intermediate, and submedian carinae of 6th segment. Telson broader than long, with strong median carina ending in spine and one pair of strong, continuous carinae, parallel to median, slightly converging towards telson anterior margin but falling short of it; in between these carinae, and parallel to them, 2-3 strong blunt tubercles (2 on left side, 3 on right side of median carina); strong conical tooth present close to inner distal extremity of each of paired intermediate carinae; parallel to intermediate continuous carina, on outer side of telson, 2 tubercles, well separated from each other, anterior one round and strong, close to telson anterior margin, posterior tubercle elongate, reaching approximately to distal end of intermediate carina. Marginal carina of telson well marked. Short carina on basis of lateral tooth, its posterior end bent outwards; strong tubercle on intermediate tooth; a little elevated, obliquely set carina on submedian tooth. Inner intermediate denticle elongated, with very short inner sinus; outer intermediate denticle much shorter, thickened on posterior margin and slightly upturned. Inner lateral denticle inconspicuous, outer one a rounded lobe. Proximal segment of exopod of uropod with 7 movable spines (one broken off). Basal prolongation of uropod relatively thick, with 3 spines, median terminal spine strongest, inner proximal spine shortest; inner margin smooth.



A



B



C

Color.—Preserved specimen shows carapace with large patch of black pigment close to posterolateral corners; posterolateral corners of 1st abdominal segment with black patch of pigment, subtriangular in shape. Conspicuous black mark on posterolateral corner of 6th segment, suboval, with light linear longitudinal band about $\frac{1}{3}$ away from outer margin of mark, and circular spot close to inner border. Median portion of all thoracic and abdominal somites with median patch of black pigment. Base of lateral teeth of telson, posterior center of telson and last segment of both exopod and endopod of uropod black.

Measurements.—Only one specimen collected, a male of 34 mm (total length).

Holotype.—Reference Collection of Estación Mazatlán, UNAM, EMU-2415.

Distribution.—Known only from the type locality, off Estero Tastiota, Sonora (28°17'N, 111°37'W), Gulf of California, Mexico. Collected at 34–37 m, on sandy bottom.

Etymology.—The species is named for the Oceanographic Vessel *El Puma*, of the Universidad Nacional Autónoma de México.

Discussion.—*Eury squilla pumae* can be distinguished from *E. veleronis*, the other species present in the area, by its much smaller rounded, not elongated cornea which is not as strongly bilobed as in *E. veleronis*. *Eury squilla solari*, a species with a smaller eye than *E. veleronis* (but bilobed and larger than that of *E. pumae*) has a spiny rostrum and long, acute antennal processes that clearly overreach the ocular scales.

The telsons of the three species of *Eury squilla* known from the East Pacific differ in the complexity of their dorsal sculpture. *Eury squilla solari* has the most elaborate pattern with, in addition to the median carina, a series of three lateral carinae that are strong and tuberculate; also present is a patch of ridges and tubercles on the base of both

the intermediate and the lateral teeth (Manning 1970). In *E. veleronis*, the sculpture are rather reduced when compared to *E. solari*, but three pairs (two well defined, a third one less so) of lateral carinae can still be distinguished; the tubercles are also less conspicuous (Schmitt 1940). In *E. pumae*, a further reduction of the carinae complex can be observed, and there is only one clearly marked, very strong dorsal pair of carinae parallel to the median one (not tuberculate), the rest being reduced to a few tubercles. *Eury squilla solari* is also the only species that has a posterior spine on the marginal carina of the 4th abdominal segment and a well defined intermediate spine on the 5th (Manning 1970). The small marginal inner spine on the basal prolongation of the uropod, present in both *E. veleronis* and *E. pumae*, is absent in *E. solari*.

Acknowledgments

This study was partly supported by CONACyT, México (ICECXNA-021996). A stay at the USNM by one of us (MEH) was supported by a grant from AID, United States Embassy, Mexico. We thank R. B. Manning for the help provided.

Literature Cited

- Hendrickx, M. E., and J. Salgado-Barragán. 1987. Los estomatópodos (Crustacea: Hoplocarida) del Pacífico mexicano.—Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, Publicación Especial. [in press]
- Manning, R. B. 1970. Nine new American stomatopod crustaceans.—Proceedings of the Biological Society of Washington 83(8):99–114.
- Schmitt, W. L. 1940. The stomatopods of the west coast of America.—Allan Hancock Pacific Expeditions 5(4):129–225.

Estación Mazatlán, Instituto de Ciencias del Mar y Limnología, UNAM. P.O. Box 811, Mazatlán, Sinaloa, 82000, México.

Fig. 1. *Eury squilla pumae*, holotype: A, Fifth and sixth abdominal somites and telson; B, Anterior part of the body; C, Uropod in ventral view. Scale bar = 1.0 mm. (Setae omitted.)